

# **POLYHYDROXYALKANOATE COMPOSITIONS FOR SOFT TISSUE REPAIR, AUGMENTATION, AND VISCOSUPPLEMENTATION**

### **Abstract of the Disclosure**

Polyhydroxyalkanoate materials are provided which are suitable for repair of soft tissue, augmentation, and as viscosupplements in animals, particularly humans. The materials comprise liquid polyhydroxyalkanoate polymer compositions or polyhydroxyalkanoate microdispersions. Devices also are provided for storage and delivery of the polyhydroxyalkanoate compositions *in vivo*. Methods are provided for repairing or augmenting soft tissue in animals using the materials. In a preferred embodiment, the method include the steps of (a) selecting the animal soft tissue to be repaired or augmented; and (b) placing an injectable, liquid polyhydroxyalkanoate polymer or a polyhydroxyalkanoate microdispersion into the animal soft tissue, preferably using a minimally-invasive method such as injection. In another embodiment, the liquid polyhydroxyalkanoate polymer compositions or polyhydroxyalkanoate microdispersions are used as viscosupplements.